

VOLUNTEER MONITORING WITH GEORGIA LAKES SOCIETY, INC.'S ADOPT A LAKE PROGRAM

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Abstract. One of the goals of Georgia Lakes Society, Inc. is to encourage the cooperation and interaction of organizations, agencies, units of government, and individuals concerned with lake, wetland and watershed improvement and protection. As a means to that goal, GLS, Inc. and the EPD Adopt A Stream program developed the Georgia Adopt A Lake program designed to promote citizen involvement in learning about and protecting lakes, ponds, reservoirs and wetlands by educating volunteers about these resources and by providing them with the information and tools needed to create local monitoring programs. Volunteer groups learn the importance and methodology of collecting information on many different aspects of their lake, pond, reservoir, or wetland. Two separate levels of involvement are available, with the number of parameters measured dependent upon the equipment the group can afford and the commitment level of the volunteers. Measurable parameters may include measuring chlorophyll-a, temperature, dissolved oxygen, fish identification, fish length to weight ratios, sedimentation, phosphorus and nitrogen levels. My presentation will explain the structure of the AAL program and will follow the progress of current volunteer groups in the state.

THE GEORGIA ADOPT A LAKE PROGRAM

Georgia Lakes Society, Incorporated (GLS, Inc.), is a non-profit assemblage of volunteers interested in promoting the understanding, protection, restoration and comprehensive management of lakes, reservoirs, wetlands and watersheds. Among the many objectives of the Society is the Georgia Adopt A Lake (AAL) and volunteer monitoring support mission (GLS, Inc. Constitution and Bylaws, 1999). The AAL program is the product of a partnership between GLS, Inc. and the Georgia Environmental Protection Division's Adopt A Stream program. Information in this section of this paper comes from the Georgia Adopt A Lake Manual which is part of the AAL workshop. The AAL program is designed to promote citizen involvement in learning about and protecting lakes, reservoirs and ponds by giving volunteers

the training and tools needed to understand what sorts of things affect the health of such water resources. Additionally, these groups learn how to collect data and become involved in the education and legislative processes which can ultimately lead to the protection water resources. GLS, Inc. is committed to providing technical support, training and guidance to such volunteer water resource (lake) monitoring groups. The bulk of this paper and presentation summarize the Georgia Adopt A Lake training manual and workshop.

As many conscientious citizens know, lakes are a valuable community asset, both economically and ecologically speaking. Economically, lakes provide many communities with a source of fresh drinking water, method of flood control, hydropower resource, and monetary and aesthetic input into local communities through recreation and tourism. Additionally, lakes can increase the value of property associated with them. Ecologically, lakes provide an important wildlife habitat for many species of plants and animals.

AAL provides a hands-on opportunity for citizens from all walks of life to improve their education about lakes and thereby, the incentive to become more involved in protecting lakes and other water resources. There are currently two program levels of involvement available in AAL; Level I and Level II. Volunteer groups may choose the appropriate level for their group based on their interest, level of commitment, and availability of funds (for monitoring equipment). GLS, Inc. provides workshops by request for training interested monitoring groups. Level I activities emphasize watershed assessment, lake walks and several basic monitoring methods. Initially, the volunteer group selects a lake to monitor, and registers with the Georgia AAL program. The AAL program arranges workshop training in order to get the ball rolling. Once appropriate local governmental officials are informed of the project, the group finds a local partner and creates a "who to call list" for lake emergencies and conducts specific activities such as an initial watershed assessment, a lake walk, and regular litter pick ups. The workshop also provides training for the identification of biological organisms and assessment of water quality and physical

habitat at one or more lake sites on a monthly basis. Groups are requested to continue their monthly monitoring for a minimum of one year, but many groups intend to continue well beyond the one year mark. Assessment characters are recorded on data forms designed specifically for the AAL program, a copy of which are remitted for comprehensive accumulation of water resource data for the state of Georgia.

Level II allows volunteers to become more involved as a citizen's monitoring group by training them how to measure specific scientific parameters indicative of lake health and water quality. Level II activities build on Level I, but are generally more advanced in scientific sampling techniques and require specific workshop training in methodology and technique. Level II activities include identifying species of fish and making fish length to weight measurements, as well as measuring such environmental parameters as chlorophyll a, temperature profiles, dissolved oxygen profiles, and estimated sedimentation. Results are again recorded on data forms, which are incorporated into a long term monitoring project maintained by GLS, Inc.. In both Level I and II, sharing of information about the lake and reporting problems when noticed help protect water quality. The AAL program incorporates "shore watch", "fish watch", "boat watch" and "Thoreau" categories of involvement under both Level I and II. There is something for everyone, whether it is walking the shoreline, fishing, sampling from a boat, or promoting aesthetics & public outreach. AAL groups are, above all, encouraged to be creative in promoting public awareness of their efforts in lake education, monitoring and protection.

CURRENT LAKE MONITORING GROUPS

Several volunteer groups around the state are either currently monitoring or are preparing to begin monitoring their adoptive lakes. Such groups target Lake Oconee, Lake Blackshear, West Point Lake, Lake Lanier, Lake Allatoona, Lake Sinclair, Lake Acworth and Yargo Lake. Some groups are farther along than are others, and their status will be reviewed in the presentation.

Lake monitoring groups send data and biological samples to one of several regional collection centers in the state. At Kennesaw State University laboratory scientists measure chlorophyll-a samples and the results are entered into a computer database in order to establish baseline data and monitor long term water resource trends. As more people become aware of the efforts and progress of these groups, the project may expand to other lakes, ponds, watersheds and wetlands. As additional information obtained, we hope to further efforts in the protection of our water resources as a whole.

Adopt A Lake workshops are offered for interested groups

in several areas throughout the state. To schedule a workshop or to obtain additional information, please consult the Georgia Lakes Society, Inc. webpage or contact me at the above address.

SELECTED REFERENCES

- Porter, Dr. Karen G., Katherine E. Baer, Laurie Hawks, Dr. Joe Dirnberger, Dr. Marty Williams, Dr. Becky Champion, Dr. Carl Quertermus, 1998.
Georgia Adopt A Lake (Manual)
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Georgia Lakes Society Web Page at
<http://science.kennesaw.edu/~jdirnber/lake.html>